

The Raleigh Amateur Radio Society's
EXCITER



RARS Auction

Photos by Chuck Littlewood K4HF

RARS EVENTS:

- The RARS General Membership meeting is the 1st Tuesday of the month.
- The RARS net meets every night @ 8 PM on 146.640.
- The RARS Technical & Trader's net is Saturdays @ 8:30 PM or following the RARS net.
- RARS meets for a monthly dinner on the 2nd Tuesday of each month.



Next RARS Meeting: November 3

7:30 PM: State-of-the-art high fidelity audio systems
presented by Dennis Had W4USR,
Cary Audio Designs.

RARS OFFICERS:

PRESIDENT

Selene Montgomery
KG4RMT
919.577.1254
kg4rmt@earthlink.net

VICE-PRESIDENT

Karl Bowman
W4CHX
919.669.6068
w4chx@arrl.net

SECRETARY

Charles Swindell
WB4DCM
919.848.0410
wb4dcm@arrl.net

TREASURER

Greg Seamster
KE4PAX
919.859.0029
ke4pax@arrl.net



The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (www.rars.org).



The Exciter

The *Exciter* is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The *Exciter* welcome articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor.

The views expressed in the *Exciter* are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

The Editor reserves the right to edit any and all pieces.

The submission deadline for each month's *Exciter* is the third Friday of the preceding month. All submissions must be final. Drafts are not accepted.

Editor: Courtney Enzor KI4HOS (editor@rars.org)

RARS General Meeting

Date: First Tuesday of each month

Location: First Alliance Church
4400 Buffaloe Road
Raleigh, NC

Time: People begin arriving at 7 PM. The meeting officially begins at 7:30 PM.

RARS Monthly Dinner

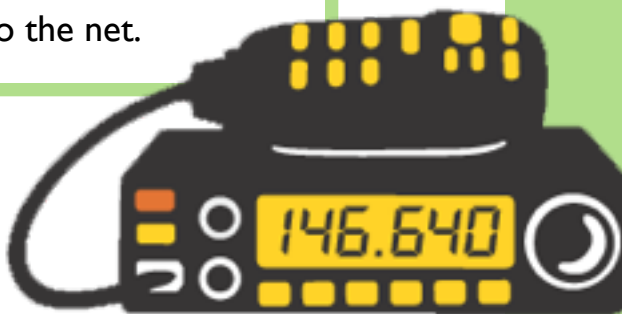
Join us on the 2nd Tuesday of each month for the RARS dinner. It's open to everyone: RARS members, non-members, friends, and family – feel free to bring your little ones! Dinner begins at 6:30 pm.

Listen to the nightly RARS net and check www.rars.org for details on the next dinner's location.

RARS Repeaters in Raleigh

145.130 (82.5 PL), 146.640, & 444.525 (82.5 PL)

Join us for the nightly RARS net @ 8 PM on the 146.640. All hams holding a Technician class license or higher are invited to check in. We welcome both RARS and non-RARS member to the net.



VE TESTING

The RARS VEs will accept walk-in testing at the February, May, August, and November RARS meetings; the RARSFest in April; the Cary Swapfest in July; the JARSFest in November; and following RARS license classes.

Please bring a photo ID, your current license, a copy of your current license, your \$15 exam fee, and any CSCEs you have for credit. Visit www.rars.org for more information.

Upcoming Hamfests

- 11/7- Stone Mountain Hamfest
11/8 Lawrenceville, GA
<http://www.totr-radio.org/08hamfest/>
- 11/14 Alabama State Convention
Montgomery, AL
<http://www.w4ap.org/modules.php?name=Hamfest>
- 11/14 NCTECH 2009
Azle, TX
<http://www.wc5c.org>
- 11/15 21st Annual JARSFEST
Benson, NC
<http://jars.net/>
- 12/5- Tampa Bay Hamfest
12/6 Palmetto, FL
<http://fgcarc.org/>
- 1/9 Winston-Salem FirstFest
Winston-Salem, NC
<http://www.w4nc.com/>

October Birthdays

Joe	WA4GIR	11/2
Carroll	KD4JH	11/7
Clayton	KE4DOX	11/7
Jeff	AC4ZO	11/8
Ashby	W5PGX	11/11
Joshua	KF4ZXK	11/15
Glenn	WA4LHE	11/16
Eric	N4GOP	11/18
Rolf	K8SL	11/19
John	N4OZL	11/21
Donald	KJ4DNI	11/21
Scott	KI4OCF	11/24
Terri	N4ZUD	11/25
Ray	KC4JWK	11/26
Doug	N3LTV	11/26
John	WB8QJN	11/27

New RARS Members

Scott Bitner	KD8FVH
Eddie Dale	No License
Nicholas Gessler	No License
Ian Hewitt	KJ4IOZ
Lee Ponto	No License
Carl Ponto	KJ4WD

September 2009 RARS Net Reports

Checkins: 590	Special Interest Nets:
Traffic: 22/19	Checkins: 305
Minutes: 677	Minutes: 722
Sessions: 30	Sessions: 12

Visitation to "The Classical Station" WCPE

Article by Ken McEwen KI4OTO

Sunday, October 10, was the date of a RARS visitation to WCPE Classical Music Station's open house. Their studios and transmitters are located just north east of Raleigh, between Rolesville & Wake Forest. I had contacted Stu Pattison about the possibility of a "techie" tour for us, because of our ham background. Thank you very much Stu, for your excellent efforts.

Upon arrival, our first contact was Jane O'Connor, Volunteer Coordinator, at the welcome/registration table.

With my mild background in broadcasting, the tour had great appeal. Particularly interesting was the "tutorial" on the production console, provided by Dick Storek, in the main studio. This is where the analog and digital start to intermingle. Obviously, the announcer and producer's voices are analog, and get mixed on analog consoles, with the analog output of the CD players (digital). Within the producer's view are at least six computer monitors and keyboards that are involved in various aspects of production and editing. Their logging computer progresses event by event! Thanks, Dick, for showing us some of the ins and outs of production.

To add to the analog/digital confusion, the staff is in the process of ripping all of their CDs to a digital storage bank. This should make individual musical pieces more quickly accessible, and eliminate the wear & tear, and loss of individual CDs. (This is going to take a while, because they have many thousands of CDs.) The library is one spot I saw, but was unable to visit (time constraints). I am sure just keeping track of all those disks is a big job for the librarian.

Although much of the signal path from microphone, through the studios, modulator, transmitters, and antennae, is analog, digital still plays important parts in the station operation. For example, the satellite feeds (I believe) are digital, and the internet feeds of course have to be digital. This mix of technology has far too many details to convey here, but, as with our stations, it is always a work in progress. It will progress as funding, time, space, attitudes, "state of the art" and other factors allow.

The walk to the transmitter building gave us an incredible view of the 1200 foot tall tower. The main antenna is, of course, on the very top, with the auxiliary antennae at about 2/3 of the tower height. Their co-ax, like ours, is 50 ohm impedance, but several inches in diameter, hard copper pipe, and nitrogen filled to reduce losses. Each of the two antennae is fed with a separate co-ax line.

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The transmitter building is "where the rubber meets the road", or where audio becomes R.F. The transmitters occupy only a couple of the rooms toward the rear of the building. This building was the interim station; studios, transmitters, and admin. space. Much of the space is now used for storage, including thousands upon thousands of records. You know those black vinyl disks or platters, with music in the grooves! "Groovy, baby!"

And the transmitters! John Graham, Engineer, showed us the two mains and one auxiliary. Each has only one tube in the final, a 4CX15000 for each of the mains, and a 3CX10000 for the aux. and big jugs they are! Feel free to see me any time, for more details.

Curtis Brothers, Outreach & Publicity director, was also on hand to explain some of the many functions happening in the back side of the transmitters.

A couple of BIG generators (250 k.w. 3 phase, I believe), and the strobe light controllers (for the tower lights) round out the show.

As you can tell, I could go on and on about this stuff, and several of us did, well into the night (after the net on .64). We were talking tubes, transmitter efficiency, broadcasting terms, like e.r.p., output power, p.e.p., coverage, etc,

As with our stations, WCPE is a privately owned and operated, "not for profit" entity. They have a small staff, with many, many volunteers to help carry the load. All station funding comes from private and corporate contributions and grants, and "listeners like you". No stock holders or public funds are involved.

Despite some similarities to ham radio, the scale and complexity are very different, indeed.

Thanks again to the staff and Debra Proctor, general manager, for having the open house, and allowing us "techies" to invade in mass.

New Ham Talent

Photos & Article by Virginia Enzor NC4VA, RARS Education Director



At the 8:30am on Saturday morning when many folks were sleeping or just uttering their first coherent sentence of the day, eleven eager beavers showed up at the RARS Technician License Preparation Class, ready to learn how to become a ham.

The class was held over the course of two Saturday mornings on October 10 and 24 at the First Alliance Church in north Raleigh. Using his own specially created PowerPoint presentation and the ARRL Ham Radio License Manual, instructor Mike Murphy WA9BPJ covered the topics “Radio Electronics Fundamentals,” and “Operating Station Equipment” on the first day. Terms such as wavelength, ampere, parallel circuit, reactance, impedance, sky wave propagation, noise blanker, dipole, etc., filled the air. On the second day, topics on “Communicating with Other Hams,” “Licensing Regulations,” “Operating Regulations,” and “Radio Safety” were discussed. The highlight of instruction for Mike Murphy was the face of 8-year-old Eric Weaver when he realized that he had mastered the Ohm’s Law for figuring out voltage, current and resistance. The moment was priceless!

During breaks on the first day, students took advantage of the opportunity to get on the radio, view QSL cards from the USA and other countries, and pick up ARRL handouts about ham radio.

The RARS W5YIVE Team administered exams in the afternoon on the final day. Serving were VE Team Coordinators Joe White WA4GIR and Liz White KO4CK, and VEs Hank Montgomery K4HM, Larry Royster KI4FYR, Julie Royster KI4OTM, and Virginia Enzor NC4VA.



Not a bit mic shy, Kevin Barker makes his first radio contact as third party traffic.

Please extend a warm welcome on the airwaves to Technicians Teri Anderson KJ4QBP, Michelle Weaver KJ4QBU, Grady Harper KJ4QBR, Ivan Harper KJ4QBQ, Reid Wright KJ4QBV, and Paul Ralph KJ4QBS, and to General Kevin Barker KJ4QBO (yes, he passed both levels of exams in one sitting)! Not taking the class but also earning his Tech License was Gary Shelby KJ4QBT. Lastly, a salute is given to CJ Orr KJ4OBQ in recognition for passing her General exam at the testing session.

The next Technician License Preparation Class will be offered in the spring of 2010.

Minutes by Charles Swindell WB4DCM, RARS Secretary September 15, 2009 RARS Board Meeting Minutes

The Raleigh Amateur Radio Society Board of Directors meet on Tuesday, September 15, 2009 at the Triangle Radio Reading Service, Six Forks Road, Raleigh. The following members were present: Rod KI4LSN, John AI4RT, Gary KN4AQ, Chuck K4HF, Hank K4HM, Selene KG4RMT, Ken KI4OTO, and Charlie WB4DCM and one visitor, David KF4VXJ.

The meeting was called to order by President Selene KG4RMT at 7:15 PM. The minutes of the July Board meeting were approved as distributed. President Selene commented that she has received positive comments about our meeting location at the First Alliance Church. She inquired if anyone had received negative comments. None were noted. It was one year ago that we moved.

VP Karl W4CHX was out of town. The October meeting program will be our auction. Cliff W4FT will be the auctioneer.

Thanks to MaryJo K4MJL, the visitors slip has been modified and she will continue to make improvements.

Treasurer Greg KE4PAX was not present. He had emailed his report. RARS currently has 215 members. Rent on the storage unit has been paid through November, 2010. The subject of the storage unit brought up a discussion about the space available. RARS currently has a four-drawer file cabinet located in a private residence. Ken KI4OTO, Chuck K4HF, and John AI4RT will review the items, re-box and try to fit into the storage unit. Greg is still compiling field day expenses.

Committee Reports:

- Virginia NC4VA was not present, however the Technician Class will be given on October 10th and 24th with the exam at the end of the second class. Additional information is available on the RARS web site.
- The *Exciter* needs articles and input.
- Web Master Hank K4HM advised that he continues to work on the membership page.
- VE testing will be given at the end of the Technician Class and at the November RARS meeting.

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- John AI4RT Public Service Chair advised that public service is an excellent training source for emergencies.
- John AI4RT Ham Fest Chair announced that the first meeting will be on Monday, September 28 at 7:00 PM at TRRS.
- Chuck K4HF Nomination Committee will report the slate of offers at the October meeting. The election will be held at the November meeting with installation in December.
- President Selene KG4RMT asked the status of the repeaters. Gary KN4AQ advised that the status has not changed since the last meeting.

At Large Director Ken KI4OTO advised that WCPE radio station is having an open house and will give hams a more technical tour. He currently has 15 folks signed up. If interested, contact Ken. Next, Ken advised that he has been looking at signs that we can use at field day and other events. They are similar to real estate signs and will cost \$5 to \$7 each.

There was no old business.

New Business:

- Hank K4HM announced that the Hemlock District of the Boy Scouts will be having their JOTA the 3rd weekend in October at the American Legion Post on Johnson Pond Rd, Fuquay-Varina.
- Chuck K4HF advised that the Red Cross will not be using ham operators at the NC Fair this year. He has not received any word on the Mini Fair in May-June.

Board Comments:

- Hank K4HM stated that he had heard that someone joined ARRL without receiving QST for \$8 per year. He wondered if that was accurate. After some discussion, it was concluded that only the blind membership can be purchased that way.

There being no further business to come before the Board, the meeting was adjourned at 8:40 PM.

October 6, 2009 RARS General Meeting Minutes

The Raleigh Amateur Radio Society held its monthly meeting on Tuesday, October 6, 2009 at the First Alliance Church on Buffalo Road, Raleigh. There were 75 members and guests present.

President Selene KG4RMT welcomed everyone including the following guests: Katie Jones, Cyrus Yunker KB2URA, Gary Shelby, James Reid, Jr KG4NNT, Hinnerk Koepp DJ4HK (from Germany), Bill Wright KJ4MNZ, Chris Waldrup KD4PBJ, Rye Gewalt K9LCJ, Rick Jackson KB4RZ, Bill Grizzard KJ4WLG, Joe Saah WB5ZPQ, Carl Ponto KJ4WD, Bob Taylor KJ4PKT, and Vincent & Jennie Rhea. Carl Anderson, who is studying for his license, was introduced by Virginia NC4VA.

The Secretary read the minutes of the September meeting. They were approved as read. President Selene read the Treasurers report. RARS now has 217 members. VP Karl W4CHX thanked everyone for their donations for the refreshments. He then announced that the November meeting program will be Denny Had W4USR doing a program on high fidelity audio equipment. In addition, Danny Hampton K4ITL may be present to receive his honorary membership in RARS.

President Selene made the following announcements:

- RARS will have VE testing at the November 3 meeting.
- The RARS supper will be Tuesday, October 13 at the Golden Corral on Glenwood Ave.
- All are welcome.
- The RARS Board will meet on Tuesday, October 20 at the Triangle Radio Reading Service on Six Forks Rd. All RARS members are invited to attend.
- There will be the usual after meeting gathering following the auction tonight.
- Phafftown hamfest will be Sunday, October 11.
- The Myrtle Beach hamfest has been cancelled.
- JARSfest is coming up in November.

Committee Reports:

- Virginia NC4VA announced that there will be a Technician Class on October 10th and 24 from 8:30am to 12:30pm. The exam will be given at 1:30pm on the 24th. The class is \$25 and the exam is \$15.
- John AI4RT Public Service stated that the Ride Without Limits this past weekend was a good event. The next public service event is the City of Oaks marathon on November 1. Check rars.org to volunteer.

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- John AI4RT RARSfest chair advised that RARSFest is coming up in April 2010. It takes a lot of volunteers to make it work.
- Chuck K4HF Nominations chair thanked Hank K4HM and Karl W4CHX for their assistance. He then went through the slate of officers as proposed by the Nominating Committee: Public Service John AI4RT, Public Information Gary KN4AQ, 2010 RARSFest John AI4RT, Exciter editor Courtney KI4HOS, Net Manager Mary KG4OQA, At-Large Director Don WA4AVU, At-Large Director Steve KJ4BX, At-Large Director Ken KI4OTO, FM Repeater Chair Gary KN4AQ, W4DW/W4RNC Trustee Jeff AC4OZ, ARRL Liaison Chuck K4HF, Education Director Virginia NC4VA, Web Master Hank K4HM, Hospitality Chair Mary Jo K4MJL, 2010 Field Day Chair Mike WA4BPJ, and VE Coordinators Liz and Joe White KO4CK & WA4GIR, respectfully. For two year terms, President Karl W4CHX and Secretary Charles WB4DCM. To complete the remaining term of the current VP, Justin AJ4MJ. At the November meeting, any additional nominations will be received and then we vote. In December, the new officers will be installed.
- Alan AB4OZ announced that the grounding program would be given at the Cary club.
- Gary KN4AQ advised that he had been asked on several occasions why RARS did not have a ham station demo at the State Fair. Since the Red Cross will no longer need our services, he asked if anyone was interested in putting together a station for the fair.

At 8:10 PM the big event of the year began, the annual RARS auction. Cliff W4FT once again did a great job of auctioneer. Moving through 60-plus items the final item was sold at 10:15. Even at that late hour, we had a devoted crowd.

President Selene thanked Cliff and everyone for attending. Meeting was adjourned at 10:15.

Local Amateur Radio Nets

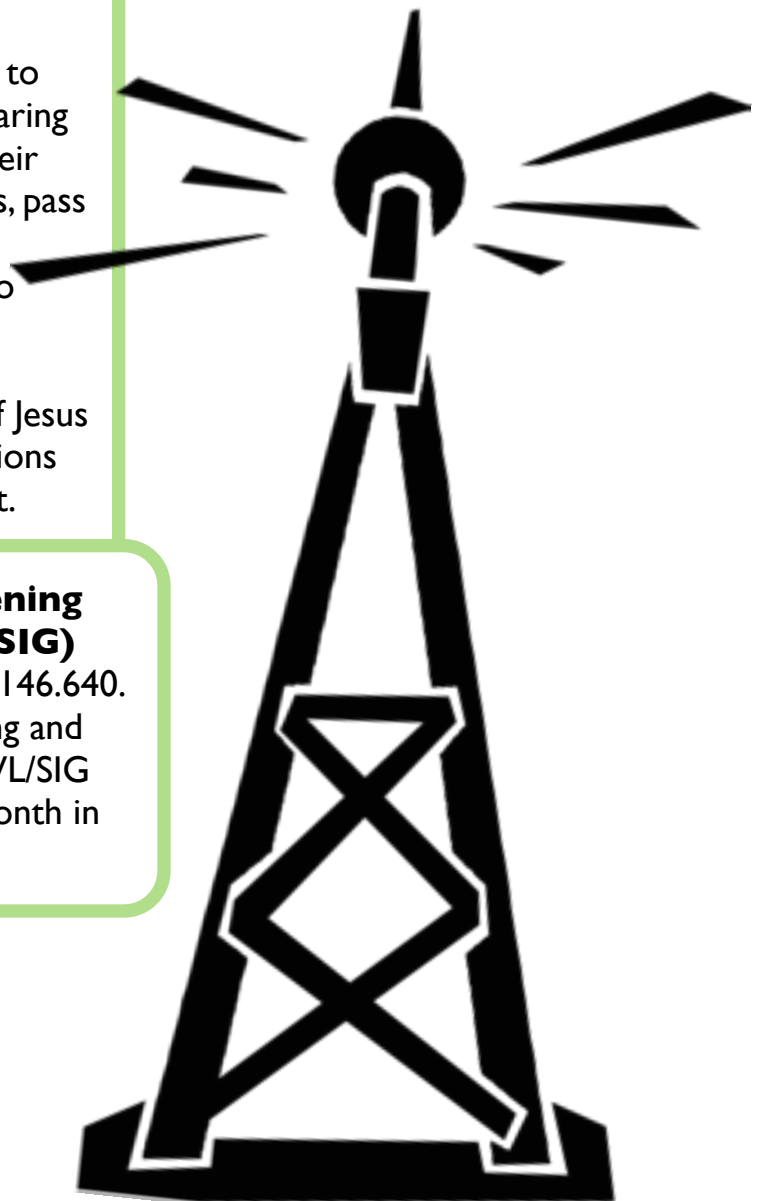
The **RARS Technical & Trader's Net** is held on Saturday evenings on the 146.640 after the 8 PM RARS net.

Apex Emergency Response Communications Net

This net meets weekly each Sunday evening @ 9 PM on the 146.640 repeater. The purpose of the net is to assist ham radio operators in preparing to respond to emergencies, test their equipment, improve operating skills, pass traffic, and to provide those with a common interest an opportunity to meet. The Apex ERC Net provides amateur radio emergency communications for The Church of Jesus Christ of Latter-Day Saints. All stations are invited to participate in this net.

Join the **Tarheel Shortwave Listening (SWL) Special Interest Group (SIG) Net** on Monday evenings @ 9 PM on 146.640. We discuss *all* areas of radio monitoring and welcome your logs! We also have a SWL/SIG meeting on the third Monday of the month in addition to our regular net.

The **VOIP Hurricane Net** is held Sundays at 00:00 UTC on the 146.775 repeater with a tone of 88.5 (IRLP node 4260). For information about activation details, go to www.voipwx.net.



Local Amateur Radio Nets

Join us every evening at 8 PM on the 146.640 repeater for the **RARS Two-Meter Net**. You can give a ragchew, check in and out (this counts for our total numbers reported to the ARRL!), make announcements, and pass traffic. We also offer National Traffic System traffic training. All licensed stations are welcome to participate in the net as often as they can. This net is also a great way to learn about amateur radio if you are newly licensed!

The **PCTN (Piedmont Costal Traffic Net)** meets every night at 9 PM on the 146.880. The purpose of the net is to handle/pass NTS formal messages. Amateur stations are encouraged to check in and participate. The backup repeater is the 147.105 (PL tone 82.5).

The **Wake County ARES Net** meets Thursdays around 2115 on the 146.880 repeater. We provide discussion and training for the implementation and provision of emergency communications for our served agencies, such as the American Red Cross and the local and state Emergency Operations Center. Please join us. For more information, check out www.wakeares.org.

Central Carolina SKYWARN

Please join us each Tuesday @ 9:15 PM on the 146.880 repeater for the CCS net. On each net there are announcements, check-ins by county, and often a program or training spot. Check us out at www.centralcarolinaskywarn.net.

November 10: "Winter Weather Outlook and More!" with NWS Meteorologist-in-Charge Darin Figskey KC2IPY.

Please join us on the **Carolina 440 Net** every Monday night at 7:30 PM. This ragchew net utilizes the Carolina 440 UHF Link Repeater System. Comprised of the Raleigh, Down East, and Coastal Wilmington link systems, there are currently 19 repeaters on the system, covering 21,168 square miles. For a list of these repeaters, please visit www.carolina440.net.

Calling All HAMS: Come Operate Aboard BB-55 From Scuttlebutt, Newsletter of the Battleship North Carolina

Our dedicated radio volunteers from the Azalea Coast Amateur Radio Club approached us several months ago with an idea they borrowed from the USS MISSOURI. They wanted to offer fellow HAMS the opportunity to transmit from the Battleship NORTH CAROLINA's radio rooms. Thanks to their willingness to staff this program, it is a reality.

Operating under the call of the ship, NI4BK, guests may enjoy a 2-hour appointment with a club member who will meet them at the Battleship ticket window. Operations will be on a 20-meter voice using a modern transceiver located in the ship's original main radio room. For operators who prefer CW (Morse code), transmissions will occur from the ship's main transmitter room. Operators will need to bring their own key or use the ship's straight key. Azalea Coast members will take care of all QSL cards. Appointments are free with regular paid ship admission. To make an appointment, please contact Kim Sincox, Museum Services Director: 910-251-5797 extension 3006 or museum@battleshipnc.com.

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Raleigh Amateur Radio Society, Inc.
PO Box 17124
Raleigh, NC 27619

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